

IN THE CLAIMS

This listing of claims replaces all prior listings:

1.-12. (Canceled).

13. (Previously Presented) A ferromagnetic fractal-coupled structure comprising a magnetic material configured to have self-similarity, wherein ferromagnetic phase transition temperature is determined by selection of fractal dimension that characterizes the self-similarity of said magnetic material.

14. (Previously Presented) The ferromagnetic fractal-coupled structure according to claim 13 wherein said fractal dimension of said magnetic material is not smaller than 2.5.

15.-17. (Canceled).

18. (Previously Presented) A fractal-coupled structure configured to have self-similarity and having a half-filled electron density, wherein interaction of electrons in an electron system can be increased larger than the band width, and Mott transition exists, said Mott transition being controlled by fractal dimension of the system.

19.-36. (Cancelled).